

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 Claim 1. (*Currently Amended*) A universal fleet electrical system for distributing electrical power to a
2 plurality of aftermarket accessories in a fleet vehicle, comprising:
- 3 (a) a fuse panel adapted for connection to a fleet vehicle's battery, the fuse panel having
4 a plurality of lighting circuit relays, each relay having a solenoid and normally open switch contacts,
5 each relay further having a fuse in series with the relay solenoid;
- 6 (b) a lighting selection junction box electrically connected to said fuse panel, the lighting
7 selection junction box having:
- 8 (i) a plurality of lighting circuits, each lighting circuit being connected to the
9 switch contacts of a separate one of said plurality of lighting relays,
10 each lighting circuit branching into a plurality of lighting subcircuits,
11 each subcircuit having a fuse for circuit protection; and
- 12 (ii) at least one terminal block having a plurality of terminals, each lighting
13 subcircuit being connected to a separate terminal on said terminal
14 block, each terminal having a connector for attachment of a lighting
15 subcircuit accessory wire;

- 16 (iii) wherein a plurality of lighting subcircuit accessories are programmably
17 connected to the switch contacts of a user selected lighting relay by
18 connecting a connector from the subcircuit accessory to a terminal on
19 said terminal block;
- 20 (c) a console panel having a plurality of user operable switches for controlling operation
21 of a plurality of aftermarket accessories added to the fleet vehicle, the console panel being
22 electrically connected to said fuse panel and said lighting selection box, wherein said console panel
23 further comprises:
- 24 (i) at least three lighting level switches, each lighting level switch being
25 connected to a separate one of said lighting relays in order to control
26 application of power to three different combinations of aftermarket
27 lighting accessories by a single switch;
- 28 (ii) a take down switch connected to one of said lighting relays for controlling
29 application of power to aftermarket lighting accessories used when
30 pulling over a motorist; and
- 31 (iii) a spare switch connected to one of said lighting relays for providing a user
32 with a programmable console switch for adding on additional
33 aftermarket accessories; and

34 (d) a universal wiring harness electrically connecting said fuse panel, said lighting selection
35 junction box, and said console panel, the wiring harness having a plurality a connectors distributed
36 throughout the fleet vehicle adapted for connection to aftermarket accessories, the connectors
37 being configured as plug and play connectors, the wiring harness having a plurality of color-coded
38 wires stamped with circuit identification labels[[,]] ~~whereby installation and maintenance time for~~
39 ~~aftermarket accessories is reduced.~~

1 Claim 2. (*Currently Amended*) The universal fleet electrical system according to claim 1, wherein said
2 fuse panel further comprises:

3 (a) a positive voltage buss bar adapted for connection to a positive terminal of the fleet
4 vehicle's battery;

5 (b) a ground buss adapted for connection to a negative terminal of the fleet ~~vehicles~~
6 vehicle's battery;

7 (c) a pair of main power fuses, each main power fuse branching into a plurality of normally
8 hot auxiliary circuits, each auxiliary circuit having a fuse for protection of the auxiliary circuit, the
9 main power fuses being directly connected to said positive voltage buss bar so that the auxiliary
10 circuits are normally hot, each auxiliary circuit having wires with red insulation and bearing indicia
11 identifying the circuit for quick identification; and

12 (d) an ignition relay having a solenoid tapped into the fleet vehicle's ignition switch and

13 having normally open switch contacts connected to a plurality of ignition controlled auxiliary
14 circuits, each ignition controlled auxiliary circuit having an auxiliary fuse and having wires with
15 orange insulation and bearing indicia for rapid circuit identification.

Claim 3. (*Canceled*)

1 Claim 4. (*Currently Amended*) The universal fleet electrical system according to claim [[3]] 1, wherein
2 said fuse panel further comprises a pair of diodes connected in series between said three lighting level
3 switches in order to prevent feedback when at least one accessory is commonly connected to more than
4 one of said lighting level switches and both switches are turned to an "ON" position.

1 Claim 5. (*Original*) The universal fleet electrical system according to claim 1, wherein said console panel
2 further comprises a programmable timer delay connected to said universal wiring harness for turning off
3 circuits a predetermined period of time after the fleet vehicle ignition switch is turned to an "OFF" position.

1 Claim 6. (*Original*) The universal fleet electrical system according to claim 1, wherein said wiring harness
2 includes a modular connector having:

3 (a) a through-the-roof base connector; and

4 (b) a light bar wiring harness having a weatherproof boot connector attachable to said base
5 connector, the light bar wiring harness being adapted for a light bar accessory mountable on a roof
6 of the fleet vehicle.

1 Claim 7. (*Original*) The universal fleet electrical system according to claim 1, wherein said console panel
2 further comprises a keyed switch interconnected with a security power control relay adapted for connection
3 with a fleet vehicle's battery, the keyed switch and security power control relay enabling a user to connect
4 and disconnect power to the universal wiring harness.

1 Claim 8. (*Original*) The universal fleet electrical system according to claim 1, wherein said universal fleet
2 electrical system further comprises a master switch with a circuit breaker adapted for connection to a fleet
3 vehicle's battery, the master switch and circuit breaker enabling a user to connect and disconnect power
4 to the universal wiring harness.

1 Claim 9. (*Currently Amended*) A universal fleet electrical system for distributing electrical power to a
2 plurality of aftermarket accessories in a fleet vehicle, comprising:

3 (a) a fuse panel adapted for connection to a fleet vehicle's battery, the fuse panel having
4 a plurality of lighting circuit relays, each relay having a solenoid and normally open switch contacts,
5 each relay further having a fuse in series with the relay solenoid;

6 (b) a lighting selection junction box electrically connected to said fuse panel, the lighting
7 selection junction box having:

8 (i) a plurality of lighting circuits, each lighting circuit being connected to the
9 switch contacts of a separate one of said plurality of lighting relays,

- 10 each lighting circuit branching into a plurality of lighting subcircuits,
11 each subcircuit having a fuse for circuit protection; and
- 12 (ii) at least one terminal block having a plurality of terminals, each lighting
13 subcircuit being connected to a separate terminal on said terminal
14 block, each terminal having a connector for attachment of a lighting
15 subcircuit accessory wire;
- 16 (iii) wherein a plurality of lighting subcircuit accessories are programmably
17 connected to the switch contacts of a user selected lighting relay by
18 connecting a connector from the subcircuit accessory to a terminal on
19 said terminal block;
- 20 ~~[[(b)]]~~ (c) a console panel having a plurality of user operable switches for controlling
21 operation of a plurality of aftermarket accessories added to the fleet vehicle, the console panel
22 being electrically connected to said fuse panel and said lighting selection box, the console panel
23 having at least three lighting level switches, each lighting level switch being connectable to different
24 combinations of aftermarket lighting accessories, wherein said console panel further comprises:
- 25 (i) at least three lighting level switches, each lighting level switch being
26 connected to a separate one of said lighting relays in order to control
27 application of power to three different combinations of aftermarket
28 lighting accessories by a single switch;

29 (ii) a take down switch connected to one of said lighting relays for controlling
30 application of power to aftermarket lighting accessories used when
31 pulling over a motorist; and
32 (iii) a spare switch connected to one of said lighting relays for providing a user
33 with a programmable console switch for adding on additional
34 aftermarket accessories; and
35 [[(c)]] (d) a universal wiring harness electrically connecting said fuse panel, said lighting
36 selection junction box, and said console panel, the wiring harness having a plurality a connectors
37 distributed throughout the fleet vehicle adapted for connection to aftermarket accessories, the
38 connectors being configured as plug and play connectors.

1 Claim 10. (*Original*) The universal fleet electrical system according to claim 9, wherein said universal
2 wiring harness further comprises a plurality of color-coded wires stamped with circuit identification
3 labels[[,]] ~~whereby installation and maintenance time for aftermarket accessories is reduced.~~

1 Claim 11. (*Currently Amended*) The universal fleet electrical system according to claim 9, wherein said
2 fuse panel further comprises:
3 (a) a positive voltage buss bar adapted for connection to a positive terminal of the fleet
4 vehicle's battery;

5 (b) a ground buss adapted for connection to a negative terminal of the fleet vehicles battery;
6 (c) a pair of main power fuses, each main power fuse branching into a plurality of normally
7 hot auxiliary circuits, each auxiliary circuit having a fuse for protection of the auxiliary circuit, the
8 main power fuses being directly connected to said positive voltage buss bar so that the auxiliary
9 circuits are normally hot, each auxiliary circuit having wires with red insulation and bearing indicia
10 identifying the circuit for quick identification; and
11 ~~[[(e)]]~~ (d) an ignition relay having a solenoid tapped into the fleet vehicle's ignition switch
12 and having normally open switch contacts connected to a plurality of ignition controlled auxiliary
13 circuits, each ignition controlled auxiliary circuit having an auxiliary fuse and having wires with
14 orange insulation and bearing indicia for rapid circuit identification.

Claim 12. (*Canceled*)

1 Claim 13. (*Currently Amended*) The universal fleet electrical system according to claim ~~[[12]]~~ 9, wherein
2 said fuse panel further comprises a pair of diodes connected in series between said three lighting level
3 switches in order to prevent feedback when at least one accessory is commonly connected to more than
4 one of said lighting level switches and both switches are turned to an "ON" position.

1 Claim 14. (*Currently Amended*) ~~[[The]]~~ A universal fleet electrical system according to claim 9 for
2 distributing electrical power to a plurality of aftermarket accessories in a fleet vehicle, comprising:

3 (a) a fuse panel adapted for connection to a fleet vehicle's battery, the fuse panel having
4 a plurality of lighting circuit relays, each relay having a solenoid and normally open switch contacts,
5 each relay further having a fuse in series with the relay solenoid;

6 (b) a lighting selection junction box electrically connected to said fuse panel, the lighting
7 selection junction box having:

8 (i) a plurality of lighting circuits, each lighting circuit being connected to the
9 switch contacts of a separate one of said plurality of lighting relays,
10 each lighting circuit branching into a plurality of lighting subcircuits,
11 each subcircuit having a fuse for circuit protection; and

12 (ii) at least one terminal block having a plurality of terminals, each lighting
13 subcircuit being connected to a separate terminal on said terminal
14 block, each terminal having a connector for attachment of a lighting
15 subcircuit accessory wire;

16 (iii) wherein a plurality of lighting subcircuit accessories are programmably
17 connected to the switch contacts of a user selected lighting relay by
18 connecting a connector from the subcircuit accessory to a terminal on
19 said terminal block;

20 (c) a console panel having a plurality of user operable switches for controlling operation
21 of a plurality of aftermarket accessories added to the fleet vehicle, the console panel being
22 electrically connected to said fuse panel and said lighting selection box, the console panel having
23 at least three lighting level switches, each lighting level switch being connectable to different
24 combinations of aftermarket lighting accessories, wherein said console panel further comprises a
25 programmable timer delay connected to said universal wiring harness for turning off circuits a
26 predetermined period of time after the fleet vehicle ignition switch is turned to an "OFF" position;
27 and
28 (d) a universal wiring harness electrically connecting said fuse panel, said lighting selection
29 junction box, and said console panel, the wiring harness having a plurality a connectors distributed
30 throughout the fleet vehicle adapted for connection to aftermarket accessories, the connectors
31 being configured as plug and play connectors.

1 Claim 15. (*Currently Amended*) ~~[[The]]~~ A universal fleet electrical system according to claim 9 for
2 distributing electrical power to a plurality of aftermarket accessories in a fleet vehicle, comprising:

3 (a) a fuse panel adapted for connection to a fleet vehicle's battery, the fuse panel having
4 a plurality of lighting circuit relays, each relay having a solenoid and normally open switch contacts,
5 each relay further having aa fuse in series with the relay solenoid;

6 (b) a lighting selection junction box electrically connected to said fuse panel, the lighting

7. selection junction box having:

8. (i) a plurality of lighting circuits, each lighting circuit being connected to the
9. switch contacts of a separate one of said plurality of lighting relays,
10. each lighting circuit branching into a plurality of lighting subcircuits,
11. each subcircuit having a fuse for circuit protection; and

12. (ii) at least one terminal block having a plurality of terminals, each lighting
13. subcircuit being connected to a separate terminal on said terminal
14. block, each terminal having a connector for attachment of a lighting
15. subcircuit accessory wire;

16. (iii) wherein a plurality of lighting subcircuit accessories are programmably
17. connected to the switch contacts of a user selected lighting relay by
18. connecting a connector from the subcircuit accessory to a terminal on
19. said terminal block;

20. (c) a console panel having a plurality of user operable switches for controlling operation
21. of a plurality of aftermarket accessories added to the fleet vehicle, the console panel being
22. electrically connected to said fuse panel and said lighting selection box, the console panel having
23. at least three lighting level switches, each lighting level switch being connectable to different
24. combinations of aftermarket lighting accessories; and

25. (d) a universal wiring harness electrically connecting said fuse panel, said lighting selection

26 junction box, and said console panel, the wiring harness having a plurality a connectors distributed
27 throughout the fleet vehicle adapted for connection to aftermarket accessories, the connectors
28 being configured as plug and play connectors, wherein said wiring harness includes a modular
29 connector having:
30 (a) a through-the-roof base connector; and
31 (b) a light bar wiring harness having a weatherproof boot connector attachable to
32 said base connector, the light bar wiring harness being adapted for a light bar accessory
33 mountable on a roof of the fleet vehicle.

1 Claim 16. (*Original*) The universal fleet electrical system according to claim 9, wherein said console panel
2 further comprises a keyed switch interconnected with a security power control relay adapted for connection
3 with a fleet vehicle's battery, the keyed switch and security power control relay enabling a user to connect
4 and disconnect power to the universal wiring harness.

1 Claim 17. (*Original*) The universal fleet electrical system according to claim 9, wherein said universal fleet
2 electrical system further comprises a master switch with a circuit breaker adapted for connection to a fleet
3 vehicle's battery, the master switch and circuit breaker enabling a user to connect and disconnect power
4 to the universal wiring harness.

Claims 18-20. (*Canceled*)